SYPHILIS

OF THE

NOSE AND LARYNX.

BY

CLINTON WAGNER, M.D.

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SYPHILIS OF THE NOSE AND LARYNX.

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OF NEW YORK,

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Secondary syphilis of the nose begins as an ordinary catarrh or cold in the head, accompanied by a profuse discharge of a thin, watery, acrid character, which is increased by changes of temperature; or it may be scanty, and of a thick, yellowish appearance. We may find pain extending to the frontal, maxillary, and sphenoid sinuses, a sense of stuffiness, partial or complete loss of smell, difficulty in breathing through one or both meati, alteration of voice, but an absence of the attacks of sneezing, which generally accompany ordinary catarrh.

An anterior rhinoscopic examination reveals a dusky red color and turgidity of the Schneiderian mucous membrane, with superficial ulcerations on the alæ, septum, and middle turbinated bones. The posterior nares will present in the mirror a swollen, hypertrophied condition of the mucous membrane covering the turbinated bones, especially the middle and inferior, and also the inferior and posterior bor-

der of the septum nasi. The same dusky hue and turgidity will be observed extending over the posterior surface of the velum, the vault of the pharynx, the orifices of the Eustachian tubes and fossæ of Rosenmuller, producing, in some cases, occlusion of the orifices of the tubes, and, consequently, deafness.

Moreover, we frequently find erosions or superficial ulcerations of the same character as the mucous patch occurring in the localities just enumerated.

In proportion to the thickening of the mucous membrane covering the septum nasi and turbinated bones, will the narrowing of the meati depend. Frequently the passing of a sound of the smallest calibre is rendered impossible.

The condition thus described may occur simultaneously with the early secondary skin affections, or subsequently, and it is a sure precursor of the tertiary in the form of ozæna, unless arrested by proper treatment.

Diagnosis.—With other symptoms of syphilis existing, or a clear history of the disease in the individual, the diagnosis is easily made; but without these there is nothing that will enable us to pronounce upon the true character of any given case. To explain further, the discharge, thickened mucous membrane, superficial ulceration, pain, etc., are precisely what you find in ordinary catarrh or struma, and in such cases, if proper local treatment had been previously tried for a reasonable length of time without good result, I would then put the patient under specific treatment. I have done this in a large number of cases in which the history of syphilis was extremely doubtful, and the good results therefrom convinced me that I have not erred; and I have no hesitation in asserting that, in my opinion, very many of those obstinate cases of so-called nasal and naso pharyngeal catarrh are of specific origin.

Hutchinson mentions syphilitic coryza as one of the forms

of hereditary syphilis, but says it disappears within the first year.

Durham, Hill, and other writers on syphilis, refer to it. Hill thinks it develops into ozæna about the tenth or eleventh year of life.

Ozæna Syphilitica is that form of tertiary syphilis characterized by ulceration of the mucous membrane of the nares, with or without necrosis of the bones and cartilages, and accompanied by a fœtid discharge and offensive breath.

Ulcerations of the nasal fossæ may be classified under two heads—non-specific and specific. The former include: 1st. Those of strumous origin. 2d. What are termed by Follin* "professional ulcers," occurring in those whose vocations compel them to inhale the noxious vapors arising from mercury, arsenic, and bi-chromate of potassa, and which, by constantly irritating the mucous membrane, bring about an ozænic condition. 3d. Certain diseases, such as typhoid fever, glanders, diphtheria, scarlet fever, and other infectious diseases. Indolent sub-mucous abscesses are formed, which, burrowing under the fibrous mucous membrane, attack the subjacent bone; sequestra result, which keep up an ulceration of the soft parts until eliminated or removed by surgical operation.

The scrofulous variety generally follows a chronic coryza, in which the pituitary membrane becomes hypertrophied and almost fungous in its character. The acrid secretions, having no free exit from the narrowing or occlusion of the meati, produce erosion, and finally ulceration of the mucous membrane, which may extend to the bone, which in scrofula rarely becomes primarily affected.

In the ozæna of syphilis, the periosteum or fibrous mucous membrane is generally primarily attacked, the inflammation extending to the bones, although it may be simply an exten-

* "Traité Elémentaire de Pathologie Externa." By E. Follin et Simon Duplay.

sion of the superficial ulcerations of the secondary form I have already described.

Trousseau says that the coryza always precedes the ozæna in children. Hill and other writers hold the same view. Hutchinson thinks the coryza disappears often in hereditary syphilis after the first year. In my opinion, the coryza is always present, but in a form so modified as not to attract the attention of those having charge of the child, and later in life the ozænic condition is insidiously established.

Follin mentions another variety, which he describes as occurring in individuals who show no indication of syphilis, in whom there is a nasal ulcer resisting all treatment, and which disappears only to reappear after a short time.

Trousseau, and before him Boyer, classed them with the herpetic diathesis, and the ulcers as a variety of psoriasis.

D'Azembuja, in a recent article on syphilis in the Gaz. de Hopital, describes an ozæna of a herpetic nature.

Desaiverve, in support of this theory, relates the case of a man who suffered for a long time with an inveterate psoriasis, and was constantly throwing off from his nostrils albuminous plugs moulded upon the turbinated bones, the mucous membrane being ulcerated at that point. He says the cases have this peculiarity, that there is no osseous lesion, differing in this respect from scrofula or syphilis.

I have met with several cases in my practice in which the "albuminous plugs" of Desaiverve were thrown off. One case I might mention: Mr. A., aged thirty-seven, merchant; primary syphilis fifteen years before consulting me; the nasal trouble had existed several years, and resisted all treatment; the mucous membrane covering the turbinated bones, as seen in the mirror, was extensively ulcerated; no osseous lesion; the plugs were frequently thrown off; no psoriasis in this case, but had it previous to consulting me. The case finally yielded to specific treatment, and was discharged cured. I am inclined to regard the psoriasis in the cases referred to

by Desaiverve as of specific origin, and the ozæna consequently syphilitic.

Pathology.—Of the pathological lesions found in syphilitic ozæna, but little is known on account of the infrequency with which examinations of the parts are undertaken. Follin, who has made numerous observations, gives the following as the result:

"Ordinarily, we find the pituitary membrane much reddened, eroded, or ulcerated, and sometimes granular, like the conjunctiva in certain forms of blepharitis, while the adjacent mucous membrane may be healthy but somewhat redder than usual. In grave forms, ulcerations, with deep loss of substance, most frequently seated at the junction of the cartilage and perpendicular plate of the ethmoid bone, although they may be found elsewhere.

"The same character of ulcerations exist on the posterior parts of the nasal fossæ, and which during life can only be demonstrated with the aid of the rhinoscope. Wherever the seat of the ulceration may be, the neighboring mucous membrane is thickened, puffed, and fungous, bleeds easily, and we frequently find it raised from the burrowing of pus, which leaves bare the subjacent bone. We do not always find the clear, cut, raised edges which we are accustomed to see in other syphilitic ulceration; on the contrary, the edges are often flattened, ragged, and fungous, the surface is covered with a grayish detritus, or a brown, fœtid crust, above and around which collects a purosanguinolent secretion; and in these cases there always exists at the point of ulceration advanced osseous alterations, the bone carious, softened, or necrosed.

"In some cases we find in the neighborhood of the ulcer which has exposed the bone a series of sinuses and fistulous passages, which detach the mucous membrane and perforate it again at a more or less distant point. Finally, in extreme cases of syphilis, we find total destruction of the

bones of the nose, ethmoid and vomer, and the whole nose may disappear in consequence. In this variety there is sometimes extension of the suppurative process to the meninges, thrombus of the ophthalmic vein, and consecutive coagulation of the sinuses of the dura mater."

Treatment.—For the secondary form, mercurials internally, followed by a course of potass. iodid., which should be continued for weeks or months.

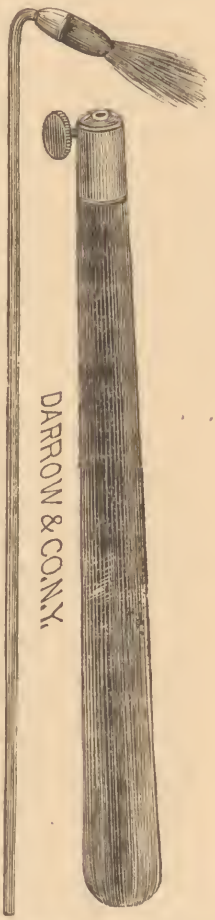
We have in this affection, as in chronic nasal catarrh, strictures, caused by thickening of the mucous membrane covering the turbinated bones and septum; it may be very slight, at one or two points only, or the entire passage may be almost entirely excluded, preventing the escape of the acrid secretion, and causing ulceration.

For several years past, in the treatment of these cases, I have employed dilatation by means of metallic sounds, bent at the angle of the Eustachian catheter. My plan is to begin with a very small instrument, and if I succeed in getting it through the passage to permit it to remain for several minutes. This operation I repeat daily, gradually increasing the size of the sound until one corresponding to a number eight urethral catheter can be passed without pain or difficulty. The excessive hyperæsthesia which is always present at first is overcome after a few days' treatment.

After passing the sounds I use immediately a weak solution of carbolic acid in the form of spray, with compressed air from one of Darrow's "Air Pumps and Receiver," and Sass' tubes, after which I apply the following thoroughly to the thickened mucous membrane by means of a piece of fine cotton wool, wrapped around the end of a small silver probe:

℞. Iodini, grs. iii.
Potassii iodidi, grs. vi.
Thymol. glycerolis, gtt. lx.
Glycerinæ, ʒi. M.

For making applications to the posterior nares, I use daily in hospital and private practice an instrument devised by me several years ago. It consists of a small, soft, camel's hair brush screwed on a rod, the extremity of which is bent at an angle of about 45°. The rod is inserted into a handle, as represented in the following cut.



The advantage this simple instrument possesses over any other I have seen used, is, that it can be introduced behind the velum without coming into contact with the posterior wall of the pharynx, by which retching, gagging, and nausea are avoided. By means of it the solution can be thoroughly applied to the turbinated bones, septum, and the spaces between the septum and bones. The posterior surface of the velum can also be touched, as well as the orifices of the Eustachian tubes.

In addition to the above treatment, the patient should make use of the nasal douche once or twice daily.

Syphilitic Ozena.—Potass. iodid. internally; also tonics, such as iron, quinine, with generous diet.

The local treatment should aim to remove all sources of irritation, such as dead bone and hardened crusts of dried mucous, the thorough and frequent cleaning of the parts by means of the nasal douche, with solutions of carbolic acid, clorinated soda or permanganate of potassa; to the ulcers, applications of nitrate of silver fused upon an aluminium rod, or a strong solution of sulphate of copper. I instruct my patients to use the douche at least twice in the twenty-four hours, and frequently dur-

ing the day to snuffle through the nostrils to the mouth a weak solution of carbolic acid or salt and water.

By means of the spray of compressed air with sufficient pressure, the viscid mucous and hardened crusts which lodge in the meati and cling to the turbinated bones, vault of pharynx, and posterior surface of the soft palate, can be removed, and the parts thoroughly cleansed for medicated applications.

Dead bone should be removed as soon as practicable. If it can not be seized and withdrawn by forceps, an operation may be resorted to which has lately been performed with marked success in a few cases. It consists in separating the upper lip and nostrils from their attachment to the upper jaws by incisions through the mucous membrane of the mouth and dividing the cartilages. An excellent view of the nares is thus obtained, with ample space for the introduction of instruments.

SECONDARY SIPHILIS OF THE LARYNX.

Secondary syphilis of the larynx generally appears within a few weeks or months after the primary symptoms, simultaneously with the early skin and mouth affections, or later; it never precedes them.

The subjective symptoms do not differ from those of ordinary laryngeal catarrh. There is frequent desire to hawk or clear the throat of the accumulated mucous, impairment of voice, varying from slight hoarseness to complete aphonia, sometimes a short hacking cough, and an absence of pain unless the pharynx is involved.

A laryngoscopic examination will reveal a dark, dusky red appearance of the mucous membrane lining the larynx, the vocal cords congested or ecchymosed, or the mucous membrane covering them may be thickened or infiltrated, and sometimes in the more chronic cases resembling the roughened, granular appearance of chronic conjunctivitis.

We will occasionally observe also the mucous patch so common in syphilis of the mouth. It is found upon the epiglottis, the ventricular bands, true cords, and arytenoids. By some authorities it is thought to be an extension of the disease from the mouth. Others deny that it is ever seen in the larynx. In the large majority of cases the mucous patch will be found to coëxist with others in the pharynx, or on the tonsils, tongue, or soft palate.

The following brief notes of a few of the cases that have been under my treatment are typical of secondary syphilis of the larynx:

Case 1. Mr. J. Lawyer, aged 22. Consulted me for hoarseness. Had indurated chancre six months ago, followed by skin trouble. At the time of his first visit to me had mucous patches upon the inside of cheeks, on the tongue, on the inter-arytenoid fold and left ventricular bands, the vocal cords reddened and thickened. Voice very hoarse.

Case 2. J. M. Merchant, aged 37. Primary sore eleven months ago, followed by skin trouble. Has patches upon soft palate and under surface of tongue, and ventricular bands; has also enlargement of post cervical glands with alopecia.

Case 3. S. Patient at the Metropolitan Throat Hospital, aged 26. Primary eight weeks ago. Patches on tongue and inside surface of cheeks and right vocal cord, both vocal cords very much reddened and thickened.

TERTIARY SYPHILIS OF THE LARYNX.

Tertiary syphilis of the larynx has long been known and recognized, but before the introduction of the laryngoscope into general practice was regarded as a disease difficult to manage and frequently fatal, and although even now we are not able to overcome the ravages of the disease in all the cases that present themselves to us, we can at least relieve them of much suffering, and ward off the dangers of sudden death by timely operative interference.

It is characterized by extensive and deep ulcerations, appearing in the large majority of cases in the following order: 1st. Upon the free edge and posterior surface of the epiglottis, extending downwards on one side or covering the entire surface to the anterior commissure. 2d. The next in order of frequency are the vocal cords and ventricular bands; then the arytenoid cartilages and inter-arytenoid fold. While this order of attack is most frequently observed, cases do occur in which other parts are first invaded.

The ulcerations may coëxist with others in the pharynx and fauces, or they may appear before or after—most frequently the latter—or they may follow immediately the superficial ulcerations of the secondary form, in which case the sub-mucous cellular tissue becomes invaded, thence to the perichondrium, from which necrosis of the cartilages will ensue; or they may follow the softening of a gummy tumor; or they may originate in the fibrous covering of the cartilages, which is analagous to the periostium of bones, and extends outwards through the overlying soft parts.

The ulcers are deep, cupped, edges raised, and covered by a grayish detritus, sometimes mixed with blood. The destruction of tissue is extremely rapid in its progress, unless arrested by appropriate treatment.

Diagnosis.—To establish a differential diagnosis between tuberculosis syphilis and cancer of the larynx is often very difficult, particularly in hospital practice, where the patients either willfully or ignorantly fail to furnish us with a history of syphilis.

Cancer of the larynx is an extremely rare affection. The cervical lymphatics are engorged, the pain is constant, and of a more acute or excruciating character than in syphilis or tuberculosis. The cartilages are attacked at a comparatively early stage, and the ulceration is more likely to be unilateral, with extensive thickening of the neighboring parts.

The majority of writers on the subject assert that without

the history of syphilis or the evidence of tuberculosis of the lungs we can not establish a diagnosis between syphilis and tuberculosis.

Türck says as a rule these ulcers have nothing characteristic.*

Mackenzie gives the "solid, pyriform swelling of the ary-epiglottic folds and the turban-like appearance of the epiglottis as characteristic of phthisis, and says in this affection thickening always precedes ulceration. In syphilis the extensive rapid ulceration is the distinctive manifestation."

Prosser James states that "the color of the mucous membrane of the throat in phthisis and syphilis is as suggestive as is that of the skin in the same affections. In the one the membrane is pale and anemic; in the other, dusky, dark-red, and in some cases mottled."†

Cohen thinks there is nothing "absolutely characteristic in the appearance of the syphilitic larynx, whether of the simple erythematous form or ulcerative variety."‡

Voltolini, on the other hand, claims that in all cases he can, without difficulty, establish a diagnosis between syphilis and tuberculosis of the larynx. He says: "In syphilis the ulcers resemble a dead body that has been nibbled by rats or mice. In tuberculosis the swollen, pale, almost transparent appearance of the arytenoid cartilages, and the collection of a large quantity of muco-purulent secretion in the inter-arytenoid space, he considers always diagnostic of phthisis, even if the lungs present no evidence of deposit. In syphilis there is an absence of this swollen condition and collection of secretion, and in its stead we find a greater destruction of tissue, and near the ulcers the parts degenerate into callosities, the time required for which would carry a case of tuberculosis to the grave."‖

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* Krankheiten des Kehlkopfes. † Laryngoscopy. Prosser James. ‡ Diseases of the Throat. ‖ "Die Anwendung der Galvanokaustik im Innern des Kehlkopfes und Schlundkopfes."

I offer the following as the result of my own observations: In tertiary syphilis the epiglottis is first attacked. Second, the vocal cords and ventricular bands; the ulcers are deeper and more defined than those of tuberculosis; there is generally perichondritis and an absence of the thickening of the arvepiglottic folds, which is always found in tuberculosis, and which I have never failed to observe. The mucous membrane in syphilis is dusky red; in tuberculosis generally pale and anemic. Finally, in ulcerative tubercular laryngitis I think deposit in the lungs will *always* be found.

Condylomata are frequently seen in syphilis; they are soft, white, and generally pointed, occurring on the interarytenoid fold, or just anterior to the arytenoids, or on the ventricular bands or vocal cords.

The following case, prepared for me by my assistant, Dr. C. M. Desvernine, is illustrative of the difficulty we sometimes encounter in establishing the differential diagnosis between tertiary syphilis and tuberculosis of the larynx:

P. G. B., aged thirty; married; occupation, clerk; applied for treatment at the Metropolitan Throat Hospital, October 13, 1875; states that his throat became sore several months ago; has dysphagia pain, inability to swallow solid food. A laryngoscopic examination showed the epiglottis reddened and very much swollen, and presenting the turban-like appearance so characteristic of the latter stages of laryngeal phthisis.

There was no history of syphilis in this case, but he stated that about four years ago he had had a severe attack of pneumonia. An examination revealed slight consolidation of the apices of both lungs. He was put upon cod-liver oil, and left after four days' treatment. No improvement.

Two months later he returned, the condition of the throat unimproved. After remaining a few days he left, with the intention of going to the South. He did not leave the city, however, but became worse, and was confined to his resi-

dence for two months. On the 23d of February he returned to the hospital. At this time he was very much emaciated from inability to take proper food, scarcely able to walk, great dyspnœa, with occasional attacks of spasm of the glottis, the epiglottis greatly swollen, œdematous, and slightly ulcerated on the right side. This ulceration increased, and the destruction of tissue was very rapid in its progress, which, together with an ulcer on the posterior pillar of the left side of the palate, unusual in phthisis, determined me to put the patient under treatment for syphilis. I began with ten grains potass. iodid. three times daily, and rapidly increased it to twenty grains five times daily. Within a week the destructive ulceration was under complete control, the swollen condition of the epiglottis had disappeared, and a satisfactory view of the parts below could be obtained. There was an absence of the thickening characteristic of tuberculosis, and, with the exception of slight ulceration of the right ary-epiglottic fold and right arytenoid, the larynx presented the appearance of health.

The patient has quite recovered in flesh and strength, and returned to duty. The lung complication, the absence of a history of syphilis, and the swollen, thickened, œdematous, and turban-like appearance of the epiglottis, misled me in my diagnosis of this case at first. The rapid progress of the ulceration, the ulcer in the mouth, and the disproportion between the laryngeal and the lung trouble, induced me to adopt the treatment for syphilis. As a rule, tubercular ulceration of the larynx does not appear until the second or third stage of pulmonary phthisis.

Sequelæ.—Stenosis of trachea or larynx, from cicatricial contraction; membranoid occlusion of larynx, formed of cicatricial tissue from ulceration; aphonia, from complete or partial destruction of the vocal cords; dysphonia, from an altered condition of the vocal cords, which is a very frequent sequel.

I refer to the thickened, roughened, uneven, appearance of the mucous membrane covering the cords. Approximation may be perfect, but hoarseness will result from inability to perform the finer vibrations.

Frequency.—At the Hospital for Diseases of the Throat, London, it is estimated that from forty to fifty per cent. of all cases that apply for treatment have syphilis. I have not seen a report of the proportion of laryngeal cases to those of the pharynx and nose.

At Guy's, Mr. Durham estimates that forty per cent. are syphilitic. Schrotter, in 3,700 cases of throat affections treated during three years at the General Hospital at Vienna, reports 120 of laryngeal syphilis—about one in every 35.

Of 55 cases of constitutional syphilis examined for me by Dr. Lowman, late of Charity Hospital, Blackwell's Island, 32 had the tertiary form, and 23 the secondary. Of the 32 cases of tertiary, 20 had laryngeal syphilis; and in the 23 cases of secondary, 19 showed manifestations of the disease in the larynx.

At the Metropolitan Throat Hospital, in 1,000 cases treated, 74 were syphilitic, of which 27 were laryngeal, 21 nasal, and 26 pharyngeal.

Treatment.— For the secondary form, mercurials, followed by potass. iodid.. Locally, during the early stages, applications with the brush of solutions of zinci sulph., ʒi to ʒi; ferri per chlor., ʒi to ʒi, or argent. nit., ʒi to ʒi.

For the thickening of the vocal cords seen in the more chronic cases, zinci chlor., ʒi to ʒi; cupri sulph., ʒss to ʒi; or the following:

Iodini, grs. iii.
Potass. iodid., grs. vi.
Glycerinæ, ʒi. M.

Vapor inhalations of creasote and the ol. folii pini sylves. will be found to act pleasantly as a soothing sedative astringent.

Abstinence from alcoholic drinks and tobacco during treatment should be insisted upon.

In the tertiary form, potass. iodid. should be freely given in large doses. If the ulceration depends upon the breaking down of a gummatous tumor, or if the tumor exists and has not began to soften, and is causing distressing dyspnœa from stenosis of the larynx, then you must rely upon potass. iodid. as your sheet-anchor. Valuable time is lost, and the patient's life is endangered, by giving ordinary doses of the drug.

In a case recently under my treatment of gummatous tumor on the left ventricular band, almost completely closing the glottis, and causing extreme dyspnœa, I began with grs. xxx three times daily, and rapidly increased the quantity until I reached ʒvi in the twenty-four hours. The tumor disappeared within a few days, and the man escaped tracheotomy, which at one time I thought inevitable.

Locally, insufflations of iodoform and applications of argent nit. and cupri sulph., and sprays of acid carbolic, are very beneficial.

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